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L4 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2003:913040 CAPLUS

DOCUMENT NUMBER:

139:375018

TITLE:

Combinations containing proton pump inhibitors for the

treatment of airway disorders

INVENTOR(S):

Hanauer, Guido; Kromer, Wolfgang; Postius, Stefan;

Simon, Wolfgang-Alexander

PATENT ASSIGNEE(S):

Altana Pharma A.-G., Germany

SOURCE:

PCT Int. Appl., 21 pp.

SOURCE.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

WO 2003094967 A2 20031120 WO 2003-EP4653 20030503 WO 2003094967 A3 20040401 W: AE, AL, AU, BA, BR, CA, CN, CO, CU, DZ, EC, GE, HR, ID, IL, IN, IS, JP, KR, LT, LV, MA, MK, MX, NO, NZ, PH, PL, SG, TN, UA, US, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR PRIORITY APPLN. INFO: AB A method for treating airway disorders comprises a reversible proton pump inhibitor and an airway therapeutic to be taken simultaneously (as a fixed oral combination) or in succession (one directly after the other or else within a relatively large time span). The reversible proton pump inhibitor is, e.g., Soraprazan or its salt, and the airway therapeutic is, e.g., Ciclesonide.	PATENT NO.					KIND DATE				APPLICATION NO.					DATE			
IS, JP, KR, LT, LV, MA, MK, MX, NO, NZ, PH, PL, SG, TN, UA, US, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR PRIORITY APPLN. INFO.: AB A method for treating airway disorders comprises a reversible proton pump inhibitor and an airway therapeutic to be taken simultaneously (as a fixed oral combination) or in succession (one directly after the other or else within a relatively large time span). The reversible proton pump inhibitor is, e.g., Soraprazan or its salt, and the airway therapeutic is	WO 20	003	0949	67		A3		2004	0401								0030	503
	PRITY A A met inhik oral withi	W: RW: APPI choc con con n cont	AE, IS, VN, AT, IT, LN. Id for ambinate relations in the second s	AL, JP, YU, BE, LU, INFO r tre nd ar ation latives, e.	AU, KR, ZA, BG, MC, : eatin n ain n) on vely	BA, LT, ZW, CH, NL, ng ai rway r in lard	BR, LV, AM, CY, PT, rwa the suc	CA, MA, AZ, CZ, RO, y dis raper cessi	CN, MK, BY, DE, SE, sorde	CO, MX, KG, DK, SI, ers to	NO, KZ, EE, SK, EP 2 comp: be ta	NZ, MD, ES, TR 002-1 rises aken ectly	PH, RU, FI, 1030! s a : simi	PL, TJ, FR, cever altar	SG, TM GB, rsib:	TN, GR, A 20 le properties	UA, HU, 0020! rotor (as a	US, IE, 507 n pump a fixed else

IT 362525-74-4

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (oral combination of reversible proton pump inhibitors and airway therapeutics for treatment of airway disorders)

RN 362525-74-4 CAPLUS

CN 7H-Imidazo[1,2-a]pyrano[2,3-c]pyridin-8-ol, 8,9-dihydro-7-(2-methoxyethoxy)-2,3-dimethyl-9-phenyl-, (7R,8R,9R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2003:875288 CAPLUS

DOCUMENT NUMBER:

139:364931

TITLE:

Preparation of nitrosated tricyclic imidazopyridine derivatives as gastric secretion-inhibitor and

anti-inflammatory and antibacterial agents INVENTOR(S):

Buhr, Wilm; Senn-Bilfinger, Joerg; Zimmermann, Peter

Jan

Ι

PATENT ASSIGNEE(S):

SOURCE:

GI

Altana Pharma Ag, Germany PCT Int. Appl., 62 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT 1	PATENT NO.				KIND DATE			APPLICATION NO.					DATE		
				_											
WO 20030	Al 20031106														
W:	AE, R	AL, AU	BA,	BR,	CA,	CN,	CO,	CU,	DZ,	EC,	GE,	HR,	ID.	IL.	IN.
	IS,	JP, KR	LT,	LV,	MA,	MK,	MX,	NO,	NZ,	PH,	PL,	SG,	TN,	UA,	US,
	ZW,	ΑM,	ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	MT			-		
RW:	AT, F	BE, BG	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
	IT, I	LU, MC	NL,	PT,	RO,	SE,	SI,	SK,	TR					•	•
PRIORITY APPI						EP 2		9104		,	A 20	00204	124		
OTHER SOURCE (MARPAT 139:36493				31										

The invention relates to nitrosated tricyclic imidazopyridines (e.g. AΒ 7,8,9,10-tetrahydroimidazo[1,2-h][1,7]naphthyridine) of formula (I) [R1 = H, C1-4 alkyl, C3-7 cycloalkyl, C3-7 cycloalkyl-C1-4 alkyl, C1-4 alkoxy, C1-4 alkoxy-C1-4 alkyl, C1-4 alkoxycarbonyl, C2-4 alkenyl, C2-4 alkynyl, fluoro-C1-4 alkyl, hydroxy-C1-4 alkyl; R2 = H, C1-4 alkyl, aryl, C3-7 cycloalkyl, C3-7 cycloalkyl-C1-4 alkyl, C1-4 alkoxycarbonyl, hydroxy-C1-4 alkyl, halogen, C2-4 alkenyl, C2-4 alkynyl, fluoro-C1-4 alkyl, cyanomethyl, etc.; R3a, R3b = H, halogen, fluoro-C1-4 alkyl, C1-4 alkyl, C2-4 alkenyl, C2-4 alkynyl, CO2H, -CO-C1-4 alkoxy, hydroxy-C1-4 alkyl, C1-4 alkoxy-C1-4 alkyl, C1-4 alkoxy-C1-4 alkoxy-C1-4 alkyl, fluoro-C1-4 alkoxy-C1-4 alkyl, (un)substituted CONH2; one of R4a and R4b or one of R5a and R5b = H, C1-7 alkyl, C2-7 alkenyl, Ph or phenyl-C1-4 alkyl and the other = HO, C1-4 alkoxy, oxo-substituted C1-4 alkoxy, C3-7 cycloalkoxy, C3-7 cycloalkyl-C1-4 alkoxy, hydroxy-C1-4 alkoxy, C1-4 alkoxy-C1-4 alkoxy, C1-4 alkoxy-C1-4 alkoxy-C1-4 alkoxy, C3-7 cycloalkoxy-C1-4 alkoxy, C3-7 cycloalkyl-C1-4 alkoxy-C1-4 alkoxy, C1-4 alkylcarbonyloxy, wholly or mainly halogen-substituted C1-4 alkoxy, etc. or in which R4a and R4b or R5a and R5b together are O (oxygen) or are C1-7 alkylidene; Arom = (un) substituted mono- or bicyclic aromatic radical; X = 0 or NH]. disclosed is the use of the compds. I for the prevention and treatment of gastrointestinal illnesses. These compds. are acid pump antagonists (APAs) with less side effects than known APAs and have an antibacterial activity against Helicobacter bacteria with less side effects than known compds. with such activity and NO (nitric oxide) releasing activity, in

which the effect against Helicobacter bacteria is synergistically enhanced on account of the gastric acid inhibiting activity of these compds. They exhibit a marked inhibition of gastric secretion and an excellent gastric and intestinal protective action in warm-blooded animals, in particular humans. Due to gastric and intestinal protection, they are useful for the prevention and treatment of gastrointestinal diseases, in particular of gastrointestinal inflammatory diseases and lesions (e.g. gastric ulcer, peptic ulcer, including peptic ulcer bleeding, duodenal ulcer, gastritis, hyperacidic or medicament-related functional dyspepsia), which can be caused, for example, by microorganisms (e.g. Helicobacter pylori), bacterial toxins, medicaments (e.g. certain antiinflammatories and antirheumatics, such as NSAIDs and COX-inhibitors), chems. (e.g. ethanol), gastric acid or stress situations.

IT 620631-28-9P

CN

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of nitrosated tricyclic imidazopyridine derivs. as gastric secretion-inhibitor and anti-inflammatory and antibacterial agents for prevention and treatment of gastrointestinal diseases)

RN 620631-28-9 CAPLUS

Pentanoic acid, 5-bromo-, (7R,8S,9R)-8,9-dihydro-7-(2-methoxyethoxy)-2,3-dimethyl-9-phenyl-7H-imidazo[1,2-a]pyrano[2,3-c]pyridin-8-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 620631-26-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of nitrosated tricyclic imidazopyridine derivs. as gastric secretion-inhibitor and anti-inflammatory and antibacterial agents for prevention and treatment of gastrointestinal diseases)

RN 620631-26-7 CAPLUS

Pentanoic acid, 5-(nitrooxy)-, (7R,8S,9R)-8,9-dihydro-7-(2-methoxyethoxy)-2,3-dimethyl-9-phenyl-7H-imidazo[1,2-a]pyrano[2,3-c]pyridin-8-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 362605-90-1

RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; preparation of nitrosated tricyclic imidazopyridine derivs. as
gastric secretion-inhibitor and anti-inflammatory and antibacterial
agents for prevention and treatment of gastrointestinal diseases)

RN 362605-90-1 CAPLUS

CN 7H-Imidazo[1,2-a]pyrano[2,3-c]pyridin-8-ol, 8,9-dihydro-7-(2-methoxyethoxy)-2,3-dimethyl-9-phenyl-, (7R,8S,9R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

3

ACCESSION NUMBER: 2003:417606 CAPLUS

DOCUMENT NUMBER:

139:946

TITLE:

Reversible proton pump inhibitors for the treatment of

airway disorders

INVENTOR(S):

Senn-Bilfinger, Joerg; Kassel, Gerd; Hanauer, Guido;

Buhr, Wilm; Simon, Wolfgang-Alexander

PATENT ASSIGNEE(S):

Altana Pharma A.-G., Germany

SOURCE:

PCT Int. Appl., 18 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.		KIND)	DATE			APPL	ICAT	ION	NO.		D.	ATE	
WO 2003043614 WO 2003043614		A2 A3		2003 2004	0311		WO 2	. –				_	0021	
W: AE, AI IN, IS TN, UA	JP,	KR,	LT,	LV,	MA,	MK,	MX,	NO.	NZ.	PH.	PT.	RO.	SG.	ST.

RN 533903-14-9 CAPLUS

CN 7H-Imidazo[1,2-a]pyrano[2,3-c]pyridin-8-ol, 7-butoxy-8,9-dihydro-2,3-dimethyl-9-phenyl-, (7R,8R,9R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 533903-15-0 CAPLUS

CN 7H-Imidazo[1,2-a]pyrano[2,3-c]pyridin-8-ol, 7-butoxy-8,9-dihydro-2,3-dimethyl-9-phenyl-, (7S,8R,9R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2001:730749 CAPLUS

DOCUMENT NUMBER:

135:272986

TITLE:

Preparation of imidazopyridine prodrugs for prevention

and treatment of gastrointestinal diseases

INVENTOR(S):

Simon, Wolfgang-Alexander; Postius, Stefan; Huber, Reinhard; Kromer, Wolfgang; Senn-Bilfinger, Joerg;

Buhr, Wilm

PATENT ASSIGNEE(S):

SOURCE:

Byk Gulden Lomberg Chemische Fabrik G.m.b.H., Germany

PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	CENT	NO.			KIN	D	DATE	ı		APP:	LICAT	NOI	NO.		D	ATE		
WO	2001	0727	56		A1	-	2001	1004	,	wo :	2001-	EP35	 14		- 2	0010	 328	
	W:	ΑE,	AL,	ΑU,	ΒA,	BG,	BR,	CA,	CN,	CO	, CZ,	EE,	GE,	HR,	HU,	ID,	IL,	
		IN,	JP,	KR,	LT,	LV,	MK,	MΧ,	NO,	NZ	, PL,	RO,	SG,	SI,	SK,	UA,	US,	
		VN,	YU,	ZA,	ZW,	AM,	AZ,	BY,	KG,	ΚZ	, MD,	RU,	ТJ,	TM		-	·	
	RW:	ΑT,	ΒE,	CH,	CY,	DE,	DK,	ES,	FI,	FR	, GB,	GR,	IE,	IT,	LU,	MC,	NL,	
			SE,												-	•	•	
AU	2001	0601	66		A 5		2001	1008		AU :	2001-	6016	6		2	0010	328	
EP	1313	740			A1		2003	0528		EP 2	2001-	9337	69		2	0010	328	
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC.	PT.	
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR				•	,	,	
BR	2001	0094	83		Α		2003	0610		BR 2	2001-	9483			2	0010	328	
JP	2003	5288'	78		Т2			0930								0010		
ИО	2002	0046	62		А			0927								0020		
US	2003	12532	27		A1		2003				2002-					0021		
PRIORITY	APP:	LN.	INFO	. :												0000	329	Sarne
											2001-					0010		
OTHER SO	URCE	(S):			MARI	PAT	135:	27298							. 2	0010.	520	

AB Imidazopyridines, such as I [R4, R5 = OH, alkoxy, alkylcarbonyloxy, carbamoyloxy, alkyloxycarbonyloxy, etc.], were prepared for pharmaceutical use as prodrugs for the treatment of gastrointestinal disorders, such as gastrointestinal inflammatory diseases and lesions and gastric acid related diseases. Thus, imidazopyridine II [R4 = O(CH2)2OMe, R5 = COMe] was prepared via O-alkylation of the corresponding diol II (R4 = R5 = OH) with MeO(CH2)2OH followed by acetylation with acetic anhydride. The prepared imidazopyridines were tested for their inhibition of stomach acid secretion of perfused rat stomach stimulated by pentagastrin.

IT 362525-48-2P 362525-50-6P 362525-52-8P 362525-54-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of imidazopyridine prodrugs for prevention and treatment of gastrointestinal diseases)

RN 362525-48-2 CAPLUS
CN 7H-Imidazo[1,2-alpy

7H-Imidazo[1,2-a]pyrano[2,3-c]pyridin-8-ol, 8,9-dihydro-7-(2-

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS 4 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 5 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: DOCUMENT NUMBER:

2001:730748 CAPLUS 135:272963

TITLE:

Preparation of pyrano[2,3-c]imidazo[-1,2-a]pyridine derivatives for the treatment of gastrointestinal

disorders

INVENTOR(S):

Simon, Wolfgang-alexander; Postius, Stefan; Kromer,

Wolfgang; Senn-bilfinger, Joerg; Buhr, Wilm

PATENT ASSIGNEE(S):

Byk Gulden Lomberg Chemische Fabrik Gmbh, Germany

SOURCE:

PCT Int. Appl., 26 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	PATENT NO.					KIND DATE			APPLICATION NO.						DATE		
WO	2001	0727	- 55		A1	_	2001	1004		wo .	 2001-	 EP35	 10		- 2	 0010	 328
	W:	ΑE,	ΑL,	ΑU,	ΒA,	BG,	BR,	CA,	CN,	CO	, CZ,	EE,	GE,	HR,	HU,	ID,	IL,
		IN,	JP,	KR,	LT,	LV,	MK,	MX,	NO,	ΝZ	, PL,	RO,	SG,	SI,	SK,	UA,	US,
		VN,	YU,	ZA,	ZW,	AM,	AZ,	BY,	KG,	ΚZ	, MD,	RU,	TJ,	TM			
	RW:	ΑT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR	, GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,
			SE,														
BR	2001	0095	89		Α		2003	0204		BR 2	2001-	9589			2	0010	328
EP	1286	999			A1		2003	0305		EP 2	2001-	9294	63		2	0010	328
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	, IT,	LI,	LU,	NL.	SE.	MC.	PT.
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL	TR	,	•			,	,
JP	2003				Т2		2003			-	2001	5706	64		2	0010	328
ИО	2002	0045	72		Α		2002	0924]	NO 2	2002-	4572				0020	
US	2003	1005	78		A1		2003	0529	1	us 2	2002-	18262	20		_	0021	
PRIORITY	Y APP	LN.	INFO.	. :							2000-1			Z	_	0000	
											2001-1				_	0010	
OTHER SO	DURCE	(S):			MARI	PAT	135:	27296		., .	2001	LI J J .		V	v 21	JOTO.	J Z ()

AB Compds. of formula I [R1 = Me, hydroxymethyl; R2-R5 = H, OH, OMe, OEt, OPr, OPr-i, OBu, methoxyethoxy, methoxypropoxy], are suitable for the prevention and treatment of gastrointestinal diseases. Thus, II is prepared and is shown to inhibit acid secretion 100% in rat stomach at 1 µmol/kg.

IT 362605-90-1P 362605-91-2P 362605-92-3P 362605-93-4P 362605-94-5P 362605-96-7P 362605-97-8P 362605-98-9P 362605-99-0P 362606-00-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyrano[2,3-c]imidazo[-1,2-a]pyridine derivs. for treatment of gastrointestinal disorders)

RN 362605-90-1 CAPLUS

CN 7H-Imidazo[1,2-a]pyrano[2,3-c]pyridin-8-ol, 8,9-dihydro-7-(2-methoxyethoxy)-2,3-dimethyl-9-phenyl-, (7R,8S,9R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 362605-91-2 CAPLUS

CN 7H-Imidazo[1,2-a]pyrano[2,3-c]pyridin-8-ol, 8,9-dihydro-7-(2-methoxyethoxy)-2,3-dimethyl-9-phenyl-, (7S,8S,9R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS 3 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4ANSWER 6 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2001:730747 CAPLUS

DOCUMENT NUMBER:

135:272962

TITLE: INVENTOR(S): Preparation of alkylated imidazopyridine derivatives Postius, Stefan; Kromer, Wolfgang; Senn-Bilfinger,

Joerg; Buhr, Wilm

PATENT ASSIGNEE(S):

BYK Gulden Lomberg Chemische Fabrik GmbH, Germany;

Simon, Wolfgang-Alexander; Altana Pharma AG

PCT Int. Appl., 57 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT	NO.	KIND DATE		APPLICATION NO.	DATE		
WO 200	1072754 1072754 1072754	C1	20011004 20030213 20040506	2001 <u>21</u> 000,	20010328		
	IN, JP, KR, VN, YU, ZA,	LT, LV ZW, AM	, MK, MX, , AZ, BY,	CN, CO, CZ, EE, GE, HI NO, NZ, PL, RO, SG, SI KG, KZ, MD, RU, TJ, TI	I, SK, UA, US,		
	PT, SE, TR			FI, FR, GB, GR, IE, I			
AU 200	1044225	A5	20011008	AU 2001-44225	20010328		
EP 131	3739	A1	20030528	EP 2001-917121	20010328		
R:	AT, BE, CH,	DE, DK.	. ES. FR.	GB, GR, IT, LI, LU, NI	CF MC DT		
	IE, SI, LT,	LV. FI	RO, MK.	CY, AL, TR	o, SE, MC, F1,		
BR 200	1009542	A.		BR 2001-9542	20010328		
JP 200	3528876	Т2	20030930				
		A			20010020		
				NO 2002-4597	20020923		
US 200	3158193	A1	20020323	US 2002-440039	20020925		
PRIORITY AP	PLN. INFO		20030021				
				EP 2000-106696	A 20000329		
OTHER SOURC	E(S):	MARPAT	135:27296	WO 2001-EP3507 52	W 20010328		

GΙ

$$R^3$$
 R^4
 R^4 ?
 R^5 ?
 R^5
 R^5
 R^6
 R^7
 R^7
 R^8
 R^8

The title compds. I (R = H, alkyl, alkoxyalkyl, hydroxyalkyl; R2 = H, AΒ alkyl, hydroxyalkyl, halo, alkenyl, alkynyl; R3 = H, halo, F3C, alkyl, alkenyl, alkynyl, hydroxyalkyl, alkoxyalkyl carbamoyl; one of R4 and R4a is H, alkyl, alkenyl, Ph and the other is HO, alkoxy, alkoxyalkoxy, alkylcarbonyloxy, R4R4a = O, alkylidene; one of R5 and R5a is H, alkyl, alkenyl, Ph and the other is H, HO, alkoxy, alkoxyalkoxy, alkylcarbonyloxy, R5R5a = O, alkylidene; R6 = H, halo, alkyl, alkoxy, alkoxycarbonylamino, F3C; R7 = H, halo, alkyl, alkoxy; X = O, NH) were prepared for the prevention and treatment of gastrointestinal diseases. Thus, (8R9R)-2,3-dimethyl-8-hydroxy-9-phenyl-7,8,9,10tetrahydroimidazo[1,2-h][1,7]napnthyridin-7-one was methylated with MeI followed by reduction with NaBH4 to give (7R,8R,9R)-2,3,8-trimethyl-7,8dihydroxy-9-phenyl-7,8,9,10-tetrahydroimidazo[1,2-h][1,7]napnthyridine (II). At 1 μ mol/kg (i.v.) II inhibited acid secretion of the perfused rat stomach stimulated pentagastrin by 100%.

IT 364041-33-8P 364041-34-9P 364041-35-0P 364041-36-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of alkylated imidazopyridine derivs.)

RN 364041-33-8 CAPLUS

CN 7H-Imidazo[1,2-a]pyrano[2,3-c]pyridine-7,8-diol, 8,9-dihydro-2,3,7-trimethyl-9-phenyl-, (7S,8R,9R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 364041-34-9 CAPLUS

CN 7H-Imidazo[1,2-a]pyrano[2,3-c]pyridine-7,8-diol, 8,9-dihydro-2,3,7-trimethyl-9-phenyl-, (7R,8R,9R)- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 7 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN L4

3

ACCESSION NUMBER: DOCUMENT NUMBER:

1998:795020 CAPLUS

130:25073

TITLE:

Preparation of fused dihydropyrans for use in the prevention and treatment of gastrointestinal diseases Grundler, Gerhard; Simon, Wolfgang-alexander; Postius,

Stefan; Riedel, Richard; Thibaut, Ulrich; Senn-bilfinger, Jorg

PATENT ASSIGNEE(S):

Byk Gulden Lomberg Chemische Fabrik Gmbh, Germany

SOURCE:

PCT Int. Appl., 33 pp. CODEN: PIXXD2

DOCUMENT TYPE:

INVENTOR(S):

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
W: AL, AU, BA, LV, MK, MX, AM, AZ, BY, RW: AT, BE, CH,	BG, BR, CA, CN, NO, NZ, PL, RO, KG, KZ, MD, RU,	WO 1998-EP3057 CZ, EE, GE, HU, ID, IL, SG, SI, SK, TR, UA, US, TJ, TM FI, FR, GB, GR, IE, IT,	JP, KR, LT, VN, YU, ZW,
AU 736767	B2 20010802		
R: AT, BE, CH,	Al 20000315 DE, DK, ES, FR, LV, FI, RO	EP 1998-929370 GB, GR, IT, LI, LU, NL,	19980523 SE, MC, PT,
US 6160119	T2 20011218 A 19981130	JP 1999-500211 ZA 1998-4463 US 1999-423626	19980523 19980526 19991116
PRIORITY APPLN. INFO.:	MARPAT 130:25073	EP 1997-108574 WO 1998-EP3057	

$$R^3$$
 R^4
 R^5
 R^7
 R^7
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AB Fused dihydropyrans I [R1 = alky1; R2 = alky1, hydroxyalky1; R3 = H, halogen; R4 = R5 = H, OH, alkoxy, alkylcarbonyloxy, oxo; R4R5 = fused heterocycle, such as OCH2O or O(CH2)2O; R6 = H, CF3, halogen, alkoxy, alkoxycarbonylamino; R7 = H, halogen, alkyl, alkoxy] were prepared for the prevention and treatment of gastrointestinal diseases. Thus, cis-I [R1 = R2 = Me, R3 = R4 = R6 = R7 = H, R5 = OH] was prepared by reaction of II with Bu3SnH/AIBN in benzene followed by treatment with saturated KOH solution The prepared compds were tested for inhibition of acid secretion on perfused rat stomach.

IT 216159-49-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of fused dihydropyrans for use in the prevention and treatment of gastrointestinal diseases)

Me

Me

ΙΙ

RN 216159-49-8 CAPLUS

7H-Imidazo[1,2-a]pyrano[2,3-c]pyridine-7,8-diol, 8,9-dihydro-2,3-dimethyl-9-phenyl-(9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

CN

(FILE 'HOME' ENTERED AT 10:17:19 ON 04 SEP 2004)

FILE 'REGISTRY' ENTERED AT 10:17:36 ON 04 SEP 2004

L1 STRUCTURE UPLOADED

L2 2 S L1

L3 33 S L1 FULL

FILE 'CAPLUS' ENTERED AT 10:18:06 ON 04 SEP 2004

10/811,496

L4

7 S L3

=> d 11

L1 HAS NO ANSWERS

L1

STR

G1 Me,[@1]

Structure attributes must be viewed using STN Express query preparation.

=>



PALM INTRANET

Day: Saturday Date: 9/4/2004 Time: 09:40:25

Inventor Name Search Result

Your Search was:

Last Name = SENN-BILFINGER

First Name = J

Application#	# Patent#	Status	Date Filed	Title	Inventor
10851092	Not Issued	020	05/24/2004	POLYSUBSTITUTED IMIDAZOPYRIDINES	SENN-BI JORG
10826337	Not Issued	020	04/19/2004	PRODRUGS OF IMIDAZOPYRIDINE DERIVATIVES	SENN-BI JORG
<u>10811496</u>	Not Issued	030	04/01/2004	PYRANO[2,3-C]IMIDAZO[-1,2-A]PYRIDINE DERIVATIVES FOR THE TREATMENT OF GASTROINTESTINAL DISORDERS	SENN-BI JORG
10783512	Not Issued	030	02/23/2004	TETRAHYDROPYRIDOETHERS	SENN-BI JORG
10667524	Not Issued	092	09/23/2003	PROCESS AND INTERMEDIATES FOR THE PREPARATION OF IMIDAZOPYRIDINES	SENN-BI JORG
10485514	Not Issued	020	02/02/2004	ALKYL-SUBSTITUTED IMIDAZOPYRIDINES FOR THE TREATMENT OF GASTROINTESTINAL DISORDERS	SENN-BI JORG
10485512	Not Issued	020	02/02/2004	AMINO-SUBSTITUTED IMIDAZOPYRIDINES FOR THE TREATMENT OF GASTROINTESTIAL DISEASES	SENN-BI JORG
10485418	Not Issued	030	01/30/2004	TRICYCLIC EPOXIDES	SENN-BI JORG
10482483	Not Issued	020	21	PROCESS FOR THE PRODUCTION OF 3-PHENYLISOSERINE	SENN-BI JORG
10380624	Not Issued	094	07/02/2003		SENN-BI JORG
10240039	Not Issued	061		To 100 TV 11	SENN-BI JVRG
10182654	<u>6696461</u>	150	10/04/2002		SENN-BI JVRG
10182652	<u>6653477</u>	150	09/19/2002		SENN-BI JORG

10182619	Not Issued	161	10/01/2002	PRODRUGS OF IMIDAZOPYRIDINE DERIVATIVES	SENN-BI JVRG
10149290	6716990	150	06/11/2002	PROCESS AND INTERMEDIATES FOR THE PREPARATION OF IMIDAZOPYRIDINES	SENN-BI JORG
10103733	<u>6696460</u>	150	03/25/2002	TETRAHYDROPYRIDOETHERS	SENN-BI JORG
09926267	6503923	150	10/03/2001	HALOALKOXY IMIDAZONAPHTHYRIDINES	SENN-BI JORG
09807970	6384048	150	04/27/2001	IMIDAZONAPHTHYRIDINES	SENN-BI JORG
09582212	6436953	150	07/19/2000	TETRAHYDROPYRIDOETHERS	SENN-BI JORG
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09381617	6197783	150	09/24/1999	TETRAHYDROPYRIDO COMPOUNDS	SENN-BI , JORG
09117139	6096758	150	07/24/1998	3-METHYLIMIDAZOPYRIDINES	SENN-BI , JORG
<u>08776391</u>	Not Issued	161	04/17/1997	ACYLIMIDAZOPYRIDINES	SENN-BI , JORG
<u>08776390</u>	6124313	150	05/16/1997	IMIDAZOPYRIDINE AZOLIDINONES	SENN-BI , JORG
<u>08776349</u>	Not Issued	161	05/05/1997	BENZYLIMIDAZOPYRIDINES	SENN-BI , JORG
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<u>08776047</u>	6162809	150		THIOPYRIDYL COMPOUNDS FOR CONTROLLING HELICOBACTER BACTERIA	SENN-BI , JORG
08765980	5922720	150		PIPERAZINE THIOPYRIDINES FOR THE CONTROL OF HELICOBACTER BACTERIA	SENN-BI , JORG
<u>08750792</u>	6107312	150	09/16/1997	THIOPYRIDINES FOR USE IN THE CONTROL OF HELICOBACTER BACTERIA	SENN-BI , JORG
08750785	5859030	150]	SUBSTITUTED ARYLALKYLTHIOALKYLTHIOPYRIDINES FOR USE IN THE CONTROL OF HELICOBACTER BACTERIA	SENN-BI , JORG
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07445611	<u>5112834</u>	150	01/16/1990	IMIDAZOLE PROTECTORANT FOR THE STOMACH AND INTESTINE	SENN-BI , JORG
06437883	4472409	250	:1	2-PYRIDYLMETHYL THIO(SULFINYL)BENZIMIDAZOLES WITH GASTRIC ACID SECRETION INHIBITING EFFECTS	SENN-BI , JORG
<u>06344172</u>	4363816	250		TRICYCLIC PYRROLES, THEIR COMPOSITIONS AND THEIR USE	SENN-BI , JORG

Inventor Search Completed: No Records to Display.

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Inventor	\$	Search	

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